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Kalamazoo, MI 49009

EXAMINER

COMPTON, ERIC B

ART UNIT	PAPER NUMBER
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3726

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/892,052

Applicant(s)

FRITZ, WOLFGANG

Examiner

Eric B. Compton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9, 11-19 and 22-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9, 11-19 and 22-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: given the extensive changes to the claims, Applicant should review and amend the references to particular claims in the Specification.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 19 and 22-23 are rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Pat. 4,648,607 to Yamada et al ("Yamada").

Regarding claim 19, Yamada discloses:

A gasket (10), comprising at least a first metal gasket plate (16) and a second metal gasket plate (15) disposed on the other to form a multi-plate gasket,

wherein the outer contour of a cut edge of the first metal gasket plate comprises a free-cutting line and an outer contour line, said free-cutting and outer contour lines together forming a corner (see Fig. 2), and

wherein a cut edge of said second metal gasket plate projects beyond the corner of the first metal gasket plate when the first metal gasket plate and said second metal

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gasket plate are disposed one on the other in said multi-plate gasket. See Fig. 2 (showing plate 15 projecting beyond corner of plate 16).

Regarding claim 22, Yamada, discloses:

A gasket (10), comprising at least a first metal gasket plate (16) and a second metal gasket plate (15) disposed on the other to form a multi-plate gasket,

wherein the outer contour of a cut edge of the first metal gasket plate comprised a free-cutting line and an outer contour line, said free-cutting and outer contour lines together forming a corner (see Fig. 2), and

wherein a cut edge of said second gasket plate comprises a first outer contour line section following a course of the outer contour line of the first gasket plate or a course of the free-cutting line of the first gasket plate when said first gasket plate and second gasket plate are disposed one on the other in said multi-plate gasket, and a second outer contour line section smoothly adjoining said first outer contour line section of the second gasket plate in the area of the corner of the first gasket plate when said first gasket plate and said second gasket plate are disposed one on the other in said multi-plate gasket. See Fig. 2 (showing plate 15 outer lines following edge lines of plate 16).

As clearly shown in FIG. 2, the steel laminate gasket 10 comprises four thin steel plates 13, 14, 15, and 16, having projections 13', 14', 15,' and 16' at a corner of the rectangular gasket 10. The size of the projections 13', 14', 15', and 16' are different, wherein the projections 13', at the bottom of the gasket is the largest and the projections 14', 15', and 16' become smaller, in turn. Consequently, when steel plates 13, 14, 15, and 16 are stacked in proper order, the projections 13', 14' 15', and 16' form a stepped wall successively and diagonally extending along the projections.

Col. 2, lines 35-45.

Note: the method of forming the device is not germane to the issue of patentability of the device itself. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior art was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Therefore, these limitations have not been given patentable weight.

Thus, the limitations regarding the contour and cut lines are not given weight as to the method they are formed. Yamada, nonetheless provides for edge line corresponding to these limitations, and provides a multi-plate gasket having a first metal gasket and second metal gasket disposed upon one another, with each layer having a smooth corner formed, wherein the second metal gasket plate projects beyond a corner of the first.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 9, 11-19 and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada in view of Applicant's Admitted Prior Art (AAPA) and DE 884936 ('936).

Yamada discloses the invention cited above, specifically providing a multi-plate gasket having a first metal gasket and second metal gasket disposed upon one another, with each layer having a smooth corner formed, wherein the second metal gasket plate projects beyond a corner of the first.

However, Yamada does not disclose how a follow-up device forms the individual plates, in particular.

AAPA, as found on page 12, fourth full paragraph to page 14, first full paragraph, in reference to Figure 2, describes the conventional device (and process) for the production of gasket plate, having a follow-on combination tool with several machining stations, a feeding device, and a tools for cutting the outer contour lines. Page 2, second paragraph, discloses, "Devices of this type are known from the state of the art." AAPA refers to the layers as a "gasket plate," which is punched from sheet metal. See Specification, page 12, fourth paragraph & page 13, second paragraph. Thus, AAPA, inherently discloses gaskets of this type are known in the art.

Figure 2, nonetheless discloses the production of a metal plate gasket. AAPA further notes:

The lateral separating areas 138 punched out of the sheet metal by the separating punches of the separating station 136 and the central separating area 140 overlap the free-cutting areas 129 cut out by the free-cutting punches of the free-cutting station 128 such that ***the outer contour lines cut by the free-cutting punches and by the separating punches adjoin one another smoothly and without any formation of corners.***

Specification, page 13, fourth full paragraph – page 14, carry-over (top) paragraph (emphasis added).

it would have been obvious to one having ordinary skill in the art at the time the invention was made to have formed the individual gasket plates of Yamada using a follow-on combination tool with several machining stations, in light of the teachings of AAPA, such that "tool costs are reduced in relation to the use of individual tools and the transit times of the gasket layer sections through the machining stations are decreased." AAPA, Specification, page 1, last paragraph.

However, the neither Yamada nor AAPA disclose that the facing outer contour lines of adjacent gasket layers are cut by a single tool using the same cutting edge.

An oral translation of DE '936, reveals that the invention discloses a device (and process) for the production of fittings (a) for furniture. A sheet of metal (b) is feed to a combination tool (see Fig 1), having multiple punches (f,g,h,i). In the final step, a section is cut from the sheet by the punch (i), which cuts the contour lines of adjacent sections using the same cutting edge. It is inherent that a feeding device is provided that moves the section (a) to become fittings through the combination tool by a feed distance equal to the width of one section.

Regarding claims 9, 13, 14, 16, 24, and 25, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have formed the gasket plates of Yamada/AAPA, by a device (and process) wherein the facing outer contour lines of adjacent gasket layers are cut by a single tool using a the same cutting

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edge, in light of the teachings of DE '936, in order to reduce waste material between adjacent layers in the prior art.

Regarding claims 11-12, both AAPA and DE '936 disclose a feed cutting station (138, and f, respectively) arranged in front station for cutting the outer contour lines, and transverse to the cutting station.

Regarding claim 15, the angle between the edges of the cutting tool (f) of DE '936 is not disclosed. The cutting angle affects the overall cutting of the contour lines. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the cutting angle 90 degrees, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claim 17, Yamada discloses gaskets having multiple metal plates.

Regarding claims 19, and 22-23, the product claimed is inherently produced by the process of AAPA/DE '936. Furthermore, the method of forming the device is not germane to the issue of patentability of the device itself. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior art was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Therefore, these limitations have not been given patentable weight.

6. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada/AAPA/DE '936 in view of either US Patent 4,862,574 to Seidy, US Patent 3,998,300 to Sullivan, or US Patent 3,822,461 to Malmstrom.

Yamada/AAPA/DE '936 discloses the invention cited above, specifically Yamada discloses gaskets having multiple metal plates. However, they do not disclose that the outer contour lines of adjacent layers essentially point symmetric to one another.

Siedy, Sullivan, and Malmstrom, all teach fabricating products from sheet material and subsequently cutting along an outer contour line of the adjacent product. Furthermore, the outer contour lines of the adjacent products have been designed to essentially point symmetric to one another. Such a design allows for products having non-linear contour lines to be packed densely without waste material between adjacent products.

Regarding claim 18, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have designed the outer contour lines of adjacent layers to point symmetric to one another, in light of the teachings of either Siedy, Sullivan, or Malmstrom, in order to provide a greater packing density, without waste between adjacent products.

Response to Arguments

7. Applicant's arguments filed August 9, 2004 ("Response"), have been fully considered but they are not persuasive.

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Note: Applicant mismarked the header of the amended claim sheet, submitted with the response "USSN 09/982,052" rather than the correct application number "09/892,052."

Applicant amended the claims to recite a multi-plate gasket comprising: a first metal gasket plate and a second metal gasket plate. This arrangement, as pointed out by Applicant, overcomes the rejections based on Yoshida and Victor, did not disclose a metal gasket of this configuration. However, this arrangement is clearly provided by Yamada.

Applicant argues with respect to DE '936 have previously been presented and addressed in the previous Office Action, but are presented again.

AAPA, as embodied in Figure 2, shows at least one free-cutting tool (138) having a corner free shape for free-cutting at least one area out of the starting material, essentially the same design as Applicant's claimed cutting tool. Cf. Figure 3 (129'); Attachment B. With regards to the prior art of Figure 2, Applicant discloses, "The lateral separating areas 138 punched out of the sheet metal by the separating punches of the separating station 136 and **the central separating area 140 overlap the free-cutting areas 129 cut out by the free-cutting punches of the free-cutting station 128 such that the outer contour lines cut by the free-cutting punches and by the separating punches adjoin one another smoothly and without any formation of corners.**" *Id.*, pages 13-14. (emphasis added). Thus, AAPA clearly discloses that the tools for cutting the contour lines of the gasket dip into the cutting areas cut by the free-cutting tools.

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The only main difference in Applicant's invention and AAPA is that the outer contours lines of adjacent gaskets do not coincide. *Compare* Figure 2 with Figure 3. "[T]he facing outer contour lines of two adjacent gasket layers must be cut by two different cutting edges." Specification, page 2, second paragraph. Therefore, it was the object of Applicant's invention to provide a device having "the tool for cutting the outer contour lines is designed such that the outer contour lines of the two adjacent gasket layers are cut with the same cutting edge ..." *Id.* fourth paragraph.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Specifically, Applicant contends that DE '936 does not teach or suggest the cutting tool dipping into the cutting area cut by the punching tools in the preceding punching stations.

Furthermore, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

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In DE '936, there are a number of cutting tools (f,g,h,i). The cutting tools (f,g) corresponds generally to the free-cutting tools (138) of AAPA and free-cut the edge of the parts (a). The other cutting tools (h) punch holes necessary to produce the particular part (a), but do not correspond to Applicant's invention in any material way. In the last step, the final cutting tools (i) cut along a coinciding (or common) contour line between adjacent parts (a). The cutting tool (i) therefore satisfies the limitation that the "cutting edge of the tool for cutting outer contour lines of the station for cutting outer contour lines," as required by the claims. *Compare* with Specification, page 3, first paragraph (disclosing "only a single cutting edge for each pair of adjacent gaskets"). Furthermore, it is apparent in Fig. 1 of DE '936, that when the cutting tool (i) cuts the contour lines between the adjacent parts (a) it also dips into the area that had been previously cut with the cutting tool (g). See Attachment A. Therefore, the limitation of "the cutting edge of the tool for cutting contour lines of the station for cutting outer contour lines dipping into said free-cutting area during the cutting procedure," as required by the claims is taught by both AAPA and DE '938.

Regarding Applicant's arguments that the prior art of DE '936, U.S. '574, U.S. '300, and U.S. '461 are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). Applicant points out that a purpose of the invention, "in the case of the inventive device the facing outer contour lines of two adjacent gasket

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layers abut directly on one another and so no waste material results between the adjacent layers and the starting material is utilized better." Specification, page 3, third paragraph. While, the prior art cited above, may not necessarily teach gasket layers, they do teach and suggest process lines for producing articles in which contour lines of adjacent articles abut directly on one another, in order to save material (i.e., no waste between articles). See '300 Cols. 1-2, lines 65-5; '574 Col 2., lines 34-35; '461 Col. 3, line 14. Thus, the prior art clearly meets the second prong of the *Oetiker* test for being reasonably pertinent to the particular problem, which Applicant faced and thus may be properly relied upon as a basis for rejecting the claims.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric B. Compton whose telephone number is (571) 272-4527. The examiner can normally be reached on M-F, 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter B. Vo can be reached on (571) 272-4690. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eric Compton
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